

National Geospatial-Intelligence Agency

2004 Innovations in Geospatial Intelligence

Broad Agency Announcement #HM1582-04-BAA-0006

INTRODUCTION

This Broad Agency Announcement (BAA) solicits offers for the award of procurement contracts for innovative, high-risk, non-traditional Geospatial Intelligence concepts, technologies and products with a potential for high-payoff. These contracts are hereafter described as the "Innovation Program."

This BAA is being publicized at www.fedbizopps.gov, www.nga.mil (click on Business Opportunities), and www.usgif.org.

GENERAL INFORMATION

The NGA expects to award up to \$1 million in procurement contracts for innovative, cutting edge Geospatial Intelligence concepts, technologies and products. The awardees will be announced during the Geospatial Intelligence Symposium 2004 to be held in New Orleans October 12-14, 2004. The United States Geospatial Intelligence Foundation hosts this Symposium. Details of this Symposium can be found at www.usgif.org.

Awards made under this BAA are Subject to the Availability of Funds.

The Government reserves the right to award all, some or none of the proposals received. All responsible sources capable of satisfying the Government's needs may submit a proposal for consideration by NGA. Awards made under this BAA will comply with export control laws related to export of and foreign access to U.S. Government-funded technology development.

Note: Only procurement contracts will be awarded as a result of this BAA. Grants, cooperative agreements, and/or any other forms of federal assistance will not be awarded.

INNOVATION PROGRAM AND OBJECTIVES

The Innovation Program is requesting advanced systems, tools, and software that demonstrate significant value-added to Geospatial Intelligence products, data, information, knowledge, decisions, approaches and or techniques. It is expected that the awards will range in value from \$50k to \$500k. Awardees will be required to formally demonstrate their systems/software, in a venue and context to be defined by the Government, at a future Geospatial Intelligence Symposium or similar NGA participating event, on or about one year after GeoInt 2004.

While existing, mature products will not be excluded, the intent is to provide funds to modify

and improve innovative systems, products or services that may have not received previous consideration because of missing features or require small to modest changes to better satisfy national security or homeland security requirements. An example (but not exclusive) would be a non-geospatial intelligence, shrink-wrap software package/tool that has significant geospatial intelligence potential (can be demonstrated to already have a 90% “Beta plus” level of maturity), but requires 10% changes/updates to meet government geospatial intelligence needs. The award would then be used to modify the existing package/tool to support geo-spatial intelligence applications.

TECHNICAL INTEREST AREAS

The Innovation Program technical interest areas are Spectral Technology and Persistent Surveillance for geospatial intelligence as described in the following sections. All Innovation Program proposals must be unclassified, but contract deliverables may be unclassified or classified.

1) Spectral Technology

The Innovation Program seeks innovative approaches to the information extraction and management of spectral imagery data in any of the areas of tasking, processing, exploitation, and dissemination (TPED). Application of innovative hyperspectral and multispectral imaging technologies to national and homeland security issues, and studies of the natural environment are sought. This would include, but is not limited to,

- a) Advanced tasking tools,
- b) Spectral registration tools (e.g., MSI to panchromatic control),
- c) Mitigation of the effects of spectral mixing (e.g., subpixel analysis), and
- d) Time change representation.

The Innovation Program also seeks innovative approaches to the quantitative study and characterization of urban and industrial civil infrastructure using unclassified commercial and civil data sources. For example, remote measurements of the material composition and condition of road networks and buildings and other characterizations of industrial and residential development are of interest. Similarly, novel techniques for the remote study of harbor, riverine, and other waterway infrastructure, including regional impacts of riverine wastewater effluents, are sought.

2) Persistent Surveillance

Persistent surveillance is defined as assured monitoring of entities and environments with sufficient frequency, continuity, accuracy, precision and spectral diversity to obtain desired information, in the presence of denial and deception.

The Innovation Program seeks innovative approaches to the application of Persistent Surveillance capabilities in national defense, homeland security, law enforcement and related domains. This would include but is not limited to inventive technologies or approaches in the following areas:

- a) Dynamic tasking of single or multiple sensors,
- b) New or improved processing techniques (e.g. Automated Target Recognition or Automated Data Extraction algorithms),
- c) Applications that support the extraction, exploitation and distribution of knowledge from diverse data/information/intelligence sources,
- d) Approaches for updating and managing temporal geospatial-intelligence information,
- e) Effective means of representing information/knowledge uncertainty,
- f) Automated viewing capabilities using content specifications with dynamic database search and retrieval capabilities,
- g) Building of near-global data sets including feature, imagery, and elevation data, with key emphasis in advanced, automated techniques for building foundation data in heretofore unachieved rapid timeframes,
- h) Synchronization approaches for distributed data holding and architectures,
- i) Applications that demonstrate innovative approaches to presenting domain knowledge and significant changes to that knowledge base as events unfold and new information is learned, and
- j) State-of-the-art techniques for selecting surveillance areas or targets of interest.

This BAA will not consider proposals for collection vehicle development. However, the BAA may consider integration of new, cutting edge technologies on existing vehicles as meeting its intent.

PREPROPOSAL CONFERENCE

The preproposal conference will consist of a briefing of the BAA followed by an interactive question and answer period. Offerors may also submit questions in writing if desired. Index cards will be available for written questions. Pertinent information follows:

Date: 17 June 2004

Time: 10:30 am to noon

Location: The Mission Partner Facility, 14520 Avion Parkway, Suite 120, Chantilly, VA.

Registration Information: Early registration is encouraged as the conference facility holds a maximum of 108 people. Participation will be limited to 1-2 individuals per organization if space becomes an issue. In order to register, fax your name, company/institution represented, telephone number, date and reason for visit (NGA Innovation Conference on 17 June 2004) to Ms. Kelly Miller at fax 703-227-1360. The phone number for fax confirmation is 703-227-1300.

Security Classification: The pre-proposal conference and the BAA are at the unclassified level.

Questions on Registering for the Pre-Proposal Conference: Contact Ms. Kelly Miller at 703-227-1366

PROPOSAL FORMAT AND REQUIREMENTS

Proposals shall be prepared single-spaced in 12 point Times New Roman font, with at least one inch margins on top, bottom and sides, for printing on 8½” by 11” paper. The proposal shall include the items identified below. Separate attachments, such as institutional brochures or reprints, are not allowed.

1) Cover Page – 1 page

The cover page shall include the BAA number (HM1582-04-BAA-0006), proposal title, and technical interest area. The cover page must also indicate the name, phone number, fax number, postal address, and e-mail address of both the technical point of contact and the administrative point of contact.

2) Executive Summary – Not to exceed 1 page

The Executive Summary shall include the research objective and overall approach.

3) Technical Proposal - Not to exceed 5 pages

Technical proposals shall not exceed five pages in length. The core capability, advancement and description of worth (the “so what” factor) must be described in one summary paragraph at the beginning of the technical proposal. The remainder of the proposal shall

- a) Describe the proposed research/objectives and approach to be undertaken. Discuss the nature of expected results. State the objectives and approach and the relationship to state-of-knowledge in the field and to similar work in progress. Include appropriate literature citations and prior work. Provide three references for previous related accomplishments including (1) date effort was completed, (2) customer organization name, (3) name of Point of Contact (POC) within the

customer organization, (4) POC voice phone number, and (5) brief description of the work performed.

- b) Describe the expected outcomes and relevance to the DoD, Intelligence Community, and Homeland Security.
- c) Discuss intellectual property and data rights. If technical data or computer software will be furnished with other than Government Purpose rights, spell that out in the proposal. Include any proprietary claims to the proposed research results, technologies and products. If there are no proprietary claims, state that. Unless specific restrictions are stated, the following default wording will be used in contracts awarded as result of this BAA. The default provision is as follows:
“The Government will receive Government purpose Rights to Technical Data and Computer Software developed and delivered under this contract.”

4) Cost Proposal – 2 pages recommended

The financial portion of the proposal will contain cost estimates in sufficient detail for meaningful evaluation. The proposal should include name, address and telephone number of the offeror’s cognizant Defense Contract Audit Agency (DCAA) audit office (if available). The cost proposal must include the type of contract proposed (i.e., fixed price, cost-reimbursable). There is no page limit for the cost section of the proposal, but 2 pages is recommended. This section shall include statements as to the basis of estimate for all proposed costs. Cost elements should include, but are not limited to

- a) Estimated number of hours by labor category and the hourly rate.
- b) Travel costs and time, and the relevance to stated objectives. This shall include a breakdown of the number of travelers, location, and duration; and estimated costs for transportation, rental car and per-diem. This shall also include travel for required attendance at a future Geospatial Intelligence Symposium or similar event, to be held on or about one year after GeoInt 2004.
- c) Other direct costs: materials and supplies; publication, documentation and dissemination; consultant services; computer services; communication costs not included in overhead; and other (identify).
- d) Indirect costs.
- e) Profit/fee.

EVALUATION CRITERIA

Evaluation of proposals will be accomplished through a peer or scientific review process using

the following evaluation criteria. The primary evaluation criteria, of equal weight, are

- 1) Relevance and potential contributions of the research to NGA missions, within one or more of the domain categories described above, and
- 2) Scientific and technical merits of the proposed concept as related to the domain categories described above.

Other evaluation criteria, of lesser importance than 1 or 2 above but equal to each other, are

- 3) Qualifications of the key research personnel,
- 4) Adequacy of current or planned facilities and equipment to accomplish the proposed conceptual objectives, and
- 5) Past performance and the realism and reasonableness of cost.

SELECTION PROCESS

Proposals will be evaluated and scored against the evaluation criteria above and ranked in terms of preference for award by an evaluation team of Government technical experts. The evaluation team will consider the overall contribution of each proposal as reflected by the evaluation scores, the potential contribution to the advancement of the targeted research topic, and the amount of available funding.

The evaluation team will forward a list of proposals recommended for award ranked in order of preference, along with a description and results of the evaluation process, to the Contracting Officer for negotiation and award.

Note: The number of awards made is dependent upon the quantity and quality of proposals received given the amount of available funding. If additional funding becomes available, NGA may choose to make additional awards under the terms of this BAA from the remaining most preferred proposals.

PROPOSAL SUBMISSION AND COMMUNICATION

Proposals shall be formatted only as .pdf files and must be less than 1.95MB in file size. The proposal must reference BAA Number HM1582-04-BAA-0006. Compressed proposals formatted as .zip files will be rejected due to potential computer virus considerations. Proposals shall be submitted by e-mail electronically to girdi04@westfields.net. NGA will send an acknowledgment of receipt of the proposal to the originator of the e-mail that forwarded the proposal.

To be considered and evaluated, the Government must receive any completed proposal by 3:00 pm, eastern daylight savings time, on 12 July 2004. Proposals received after the

closing time will be treated according to Federal Acquisition Regulation part 15.208.

Restrictive notices notwithstanding, proposals may be handled, for administrative purposes only, by a support contractor. This support contractor is prohibited from competition in NGA technical research in this program area and is bound by appropriate nondisclosure requirements. Support contractors may be involved with technical administration of the contracts awarded under this BAA.

The Source Selection Evaluation Team shall be Government Personnel only. Contractor support personnel may act as advisors in the evaluation of contractor proposals but they cannot be the actual, voting members of the Source Selection Evaluation Team. NGA shall employ the proper releases, conflict of interest, and non-disclosure agreement provisions with these contractors. Contractors that act as advisors in the evaluation of proposals submitted under this BAA are prohibited from competing in this BAA.

All correspondence and questions on this BAA should be directed to the Contracting Officer identified below. NGA encourages use of e-mail for any correspondence relating to this BAA.

Note: Only e-mail proposals are allowed. Paper proposals will not be accepted.

SOURCE SELECTION OFFICIAL

Stephen W. Long, Technical Executive, InnoVision Directorate

Voice: (301) 227-3347

E-mail: longsw@nga.mil

CONTRACTING OFFICER POINT OF CONTACT

All communication concerning BAA #HM1582-04-BAA-0006 shall be through Mr. Andrew Karl, Contracting Officer:

Voice: (703) 735-3205

Fax: (703) 735-3965

E-mail: karla@nga.mil

or Mr. Stephen Sturtz (703-735-3900, Stephen.L.Sturtz@nga.mil).

This Broad Agency Announcement and related information is available from www.nga.mil (click on Business Opportunities).